

REMARKS

Applicant has studied the Office Action and, with this Amendment, considers the application to be in condition for allowance. Claims 1-52 are presently pending in this application, with Claims 5, 8, 14, 15, 26, 28, 34, 38, 44, and 48 amended, and new Claims 49-52 added. Reconsideration and review of the application is respectfully requested.

As a preface, the Applicant acknowledges with appreciation the allowance of Claims 1-7, 9-12, 16, 18-22, 24, 29-33, 35, 39-43, and 45, and the Examiner's acknowledgement of application priority under 35 U.S.C. § 119. Claim 5 has been amended to clarify certain aspects of the present application and remains dependent upon allowed dependent Claim 4. Therefore, the Applicant respectfully submits that Claim 5 is still in condition for allowance.

Claims 15, 28, 38, and 48 are objected to because of an informality. The Applicant has corrected the misspelling of the word "musical." In Claims 28, 38, and 48, the Applicant has also corrected the misspelling of the word "addresses." Therefore, the Applicant respectfully requests that the objections of Claims 15, 28, 38, and 48 be withdrawn.

Claims 8, 13-15, 17, 23, 25-28, 34, 36-38, 44, and 46-48 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. These rejections are respectfully traversed.

The Examiner lists Claims 8, 16, 23, 34, and 44 for failing to provide limits, either taught or recited, which define what is meant by the term "substantially." At the outset, the Applicant notes that Claim 16 was listed by the Examiner as an allowed claim, but is listed here as being a rejected claim. The Applicant believes that the Examiner meant to list Claim 16, rather than Claim 15, as being rejected, and will proceed upon this

assumption. This is further supported by the fact that the Examiner noted that Claim 15 would be allowed if amended to correct the informality objection discussed above.

The present application is directed towards a sound source system based on computer software that reduces costs, adds flexibility, and in certain embodiments avoids having to add special dedicated hardware. In one embodiment of the present invention, operation blocks are provided that are composed of software used to compute waveforms for generating a plurality of musical tones through a plurality of channels according to performance information. One or more of these operational blocks may be eliminated to reduce the number of the operation blocks allocated to a given channel (pg. 25, Ins. 17-25, pg. 26, Ins. 11-26).

The Applicant submits that the term "substantially" is sufficiently taught and recited in the specification to enable one skilled in the art to understand the present application. As noted in the MPEP § 2173.05(b), the fact that claim language is not precise does not automatically render the claim indefinite under 35 U.S.C. § 112, second paragraph. Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification, or whether the specification provides some standard for measuring the relative terminology. *Id.* The term "substantially" is specifically cited, at MPEP § 2173.05(b)(A), as being acceptable claim language and the Applicant submits that the term is sufficiently explained in the specification to enable one of ordinary skill in the art to understand what is claimed. Specifically, an adjusting device operates to adjust the number of operation blocks to be allocated to the channel (pg. 26, Ins. 22-22) and also operates when one of the operation blocks declines to become inactive in the system without "substantially" affecting other operation blocks of the system (pg. 27, Ins. 9-13). Therefore, the other operation blocks continue to operate without being unduly affected and the Applicant submits that the terminology satisfies the MPEP requirements and is sufficiently taught and recited in the specification.

Claims 8, 34, and 44 have been amended to clarify certain aspects of the present application. Based on the discussion above, the Applicant submits that these claims are still in condition for allowance.

The Examiner lists Claims 13, 25, 36, and 46 for failing to provide limits, either taught or recited, which define what is meant by the terms "relatively heavy" or "relatively light." At the outset, the Applicant notes that Claims 14 and 26 are listed generally above as being rejected, but the Examiner has not listed the reason. Claims 14 and 26 have been amended simply to correct typographical errors and these claims are also dependent upon Claims 13 and 25. Thus, the Applicant believes that Claims 14 and 26 along with Claims 13, 25, 36, and 46 are allowable based upon the following discussion.

As discussed above, the MPEP § 2173.05(b) allows for relative terminology if one of ordinary skill in the art would understand what is claimed, in light of the specification, or whether the specification provides some standard for measuring the relative terminology. The Applicant submits that the specification provides adequate disclosure. Specifically, in accordance with an embodiment of the present invention, the present application discloses the use of a software module to compute samples of a waveform in response to a sampling frequency for performing an operation of generating a musical tone according to performance information (pg. 48, Ins. 1-4). By detecting a computational load imposed on the processor executing the software module, the variable sampling frequency can be adjusted based on the detected load to adjust the rate of computation of the samples (pg. 48, Ins. 1-11). Therefore, a fast sampling frequency can be selected when the detected load is "relatively light" and a slow sampling frequency can be selected when the detected load is "relatively heavy." These terms are relative to each other and may also be affected by various other factors such as processor speed, demands placed upon the processor, etc. The Applicant submits that these terms satisfy the MPEP requirements and are sufficiently

taught and recited in the specification such that absolute limits are not required because the sampling frequency varies based on the computational load placed on the processor.

The Examiner lists Claims 17, 27, 28, 37, 38, 47, and 48 for failing to provide limits, either taught or recited, which define what is meant by the terms "relatively slow" or "relatively fast." As discussed above, the MPEP § 2173.05(b) allows for relative terminology if one of ordinary skill in the art would understand what is claimed, in light of the specification, or whether the specification provides some standard for measuring the relative terminology. Specifically, the specification discloses a trigger signal occurring at a relatively slow rate to define a frame period between successive signals and a sampling signal occurring at a relatively fast rate such that a plurality of sampling signals occur within one frame period (pg. 63, Ins. 21-26, pg. 75, Ins. 18-23). The trigger signal and the sampling signal are defined relative to each other. Thus, the Applicant submits that the terms satisfy the MPEP requirements and are sufficiently taught and recited.

The Examiner lists Claim 46 for failing to provide limits, either taught or recited, which define what is meant by the terms "fast" or "slow." The Applicant submits that Claim 46, based on the discussion above for Claims 13, 25, 36, and 46, is sufficiently taught and recited and that absolute limits are not required. Therefore, the Applicant respectfully requests that the rejections of Claims 8, 13-15, 17, 23, 25-28, 34, 36-38, 44, and 46-48 be withdrawn.

The Applicant submits that new Claims 49-52 are also considered to be in condition for allowance. These new claims clarify certain aspects of the present application and, based on the discussion above for the original claims, are believed to be in condition for allowance. Therefore, the Applicant respectfully submits that Claims 49-52 are in condition for allowance.

In view of the foregoing, the Applicant maintains that Claims 1-52 are in condition

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for allowance. Reconsideration and withdrawal of the rejections is respectfully requested, and a timely Notice of Allowability is solicited.

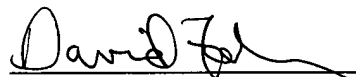
To the extent necessary, Applicant petitions the Commissioner for a two-month extension of time, extending to May 28, 1999, the period for response to the Office Action dated December 28, 1999.

A check in the amount of \$72.00 is enclosed for the later presentation of four (4) total claims in excess of twenty (20), pursuant to 37 C.F.R. § 1.16(c).

The Commissioner is authorized to charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 07-1853.

Respectfully submitted,

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